

# National Reconnaissance Office — Moving Toward the Learning Organization

## Transition Gradual But Deliberate

CAPT. MICHAEL MORAN, U.S. AIR FORCE

For over 30 years, the National Reconnaissance Office (NRO) has acquired and operated the world's most advanced space-based intelligence capabilities. A covert, classified operation for most of those 30 years, NRO provided this service to the national and military leaders of the United States under the tightest security. In 1992 that veil of security was lifted to enhance NRO's ability to provide space-based intelligence to a larger set of customers.

With the "fact of" NRO's existence now declassified, we have one of the first opportunities to see into the NRO and discover, in part, how they plan to continue providing this critical national intelligence service in an era of rapid technological change and governmental restructuring. What we will see is a close coupling between the NRO's strategic planning activities and the concept of the learning organization.

### A Clear Vision and Defined Goals

The first product of the NRO's strategic planning efforts, its vision statement, gives us a clear indication of the organization's emphasis on the future and the means to achieve success: *Freedom's Sentinel in Space: One Team, Revolutionizing Global Reconnaissance*.

*Moran is currently a Program Element Monitor for Space Based Infrared Systems, The Pentagon, Washington, D.C. He previously served as the Signals Intelligence Program Resource Liaison at the National Reconnaissance Office headquarters. A graduate of DSMC 98-2, Moran holds a Master's Degree in Systems Management from the University of Southern California and is a Certified Program Management Professional.*

The first four words, "Freedom's Sentinel in Space," capture the essence of the vision in terms that each of us can imagine...a single sentinel, vigilant, protecting the cause of freedom from a remote, lonely post in space.

A closer examination of the next two words, "One Team," immediately tells us the means by which the NRO plans to achieve its desired future state. The means—one that is perhaps not unique among organizations—is through a single, interdependent team of people.

This is not so surprising a revelation. Many organizations recognize the importance of people to achieve their mis-

sion, but they don't always recognize the difference and the importance of those people working as a team.

The NRO's focus on "One Team" is all the more challenging a target considering the number and diversity of the workforce it employs. Officer, enlisted, and civilian members of all the armed services, as well as government personnel from the Central Intelligence Agency and numerous other intelligence organizations make up this diversified workforce. As difficult as it can be to merge a 30-person office into a single team, trying to achieve the same synergy among the NRO's much larger workforce is a substantial undertaking indeed.



NRO HEADQUARTERS, CHANTILLY, VA.  
Photo courtesy NRO



Oil Fields

NIGHT VISION IMAGE, FIRES IN  
KUWAIT, MARCH 1991  
Photo Courtesy NIMA



TITAN IV CENTAUR LAUNCH FROM  
CAPE CANAVERAL, FLA.  
Photo Courtesy U.S. Air Force

While the two words “One Team” provide us insight into the means, the last three words show us the NRO’s future state. “Revolutionizing Global Reconnaissance” recognizes both the chartered mission of the NRO – to provide space-based reconnaissance for the nation—and the need to do so in a way that is dramatically different than today.

The information revolution is not only changing the way we deal with information, but also expanding our access to information. Out of the collapse of the former Soviet Union and the dramatic events of Desert Storm has emerged a parallel revolution – a Revolution in Military Affairs.

In recent years, DoD’s acquisition community, a major partner in acquisition with the NRO, has recognized that the Revolution in Military Affairs demands a commensurate Revolution in Business Affairs. Without dramatic changes in its business affairs, DoD’s fiscal resources may not be sufficient to sustain the fighting force needed to meet the challenges of the next century.

The NRO’s vision responds to this need for dramatic change and has begun that change, in part, by focusing on systems. The combination of systems thinking with a single, interdependent team of people will result in a powerful space-based capability, able to meet our intelligence needs in an uncertain future.

Taking their strategic planning one step further, NRO’s leadership followed their vision with specific goals for the organization. Using the balanced score card approach, shown on the next page, they aligned their goals under four primary areas: customer satisfaction, process improvement, financial management, and employee satisfaction. Within each of the four areas, they further defined their goals to an even greater level of specificity.

**Customer satisfaction** requires that the NRO provide assured, timely, global coverage; provide tailored information on-demand, to customers worldwide; and, through teaming with our mission partners, establish and maintain strong customer relationships.

**Process improvement** requires that the NRO be the government’s best system acquisition and operations organization and conduct an aggressive, customer focused research and development program that fosters innovation and creativity.

**Financial management** requires that the NRO develop and sustain a financial management process that optimizes the use of our resources; and ensures government and contractor financial systems provide reliable, timely, and accurate information.

Finally, **employee satisfaction** requires that the NRO create and maintain a world-class NRO workforce who will revolutionize global reconnaissance; provide a quality work environment that enables our workforce to excel; and develop a streamlined, open, corporate management climate.

## The Learning Organization Concept

So the question, then is “How do the NRO’s strategic planning steps relate to the concepts of the learning organization and to systems thinking?”

The learning organization concept has gained notoriety by Peter Senge of MIT’s Sloan School of Management.<sup>1</sup> Dr. Senge serves as the Direc-

tor of the Center for Organizational Learning where he has for many years espoused the concept of the learning organization as a means of improving the organization and its effectiveness. Senge describes the concept based on five learning principles: personal mastery, mental models, shared vision, team learning, and systems thinking.

“Learning in organizations means the continuous testing of experience, and the transformation of that experience into knowledge – accessible to the whole organization, and relevant to its core purpose.” In these words Dr. Senge describes the core concept of organizational learning.

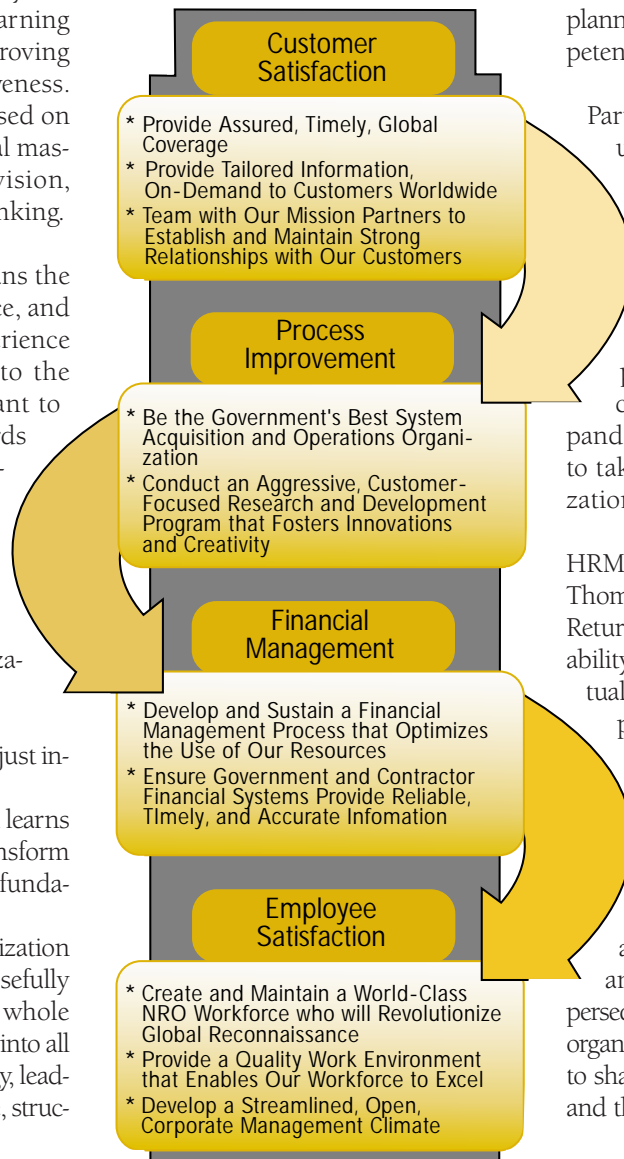
John Redding, in his article, “Hardwiring the Learning Organization,” describes the key premises of the learning organization:<sup>2</sup>

- Organizations and groups, not just individuals, learn.
- The degree that an organization learns determines its capability to transform itself to meet demand for fast, fundamental change.
- A company is a learning organization to the degree that it has purposefully built its capacity to learn as a whole system and woven that capacity into all of its aspects: vision and strategy, leadership and management, culture, structure, systems, and processes.

Former Secretary of Defense William J. Perry, in his response to the Vice President’s charge to reinvent government, supported the learning organization concept.<sup>3</sup> Secretary Perry established three-year DoD acquisition goals centered on delivering great service, fostering partnership, and internal reinvention.

Within his “delivering great service” area, Perry defined goal four as, “Create a world-class learning organization by offering 40 or more hours annually of continuing education and training to the DoD acquisition-related workforce.” The NRO, as a joint DoD and Central Intelligence Agency, has also picked up the concept in several ways.

## The Balanced Scorecard



ses; implementation of self-directed work teams; support of other offices’ strategic planning processes; and NRO core competency studies.

Part of these efforts has included the use of scenario planning, which assists managers in making decisions by looking at the possible outcomes of their decisions given different situations. Through the scenario development approach, HRMG provides a technique that, with continuous application, will expand the ability of the NRO workforce to take actions to improve the organization.

HRMG has recognized, as Joyce Thompsen did in her paper “Achieving Return on Critical Knowledge,” that the ability to manage and leverage intellectual capital – the knowledge and competencies of people – is the surest predictor of continued success.<sup>4</sup>

### Intranet

The NRO has also linked itself to other government agencies via an intranet. This intranet provides a critical ability to share knowledge among all the geographically dispersed NRO locations and with non-NRO organizations. This tool provides a means to share information, share experiences, and therefore share learning.

However, there remain difficulties in interacting with the NRO’s industrial partners who are a vital part of the NRO team. Just as the Internet is still in its infancy, so too this intranet requires a great deal of expansion to other information sources and an increase in its use as a tool to aid in the continuous learning process.

### Chief Learning Officer

To continue moving toward the learning organization and resolve issues such as the evolution of the intranet mentioned above, the NRO could choose to establish a Chief Learning Officer (CLO). Maria Nathan uses the CLO term to refer to a transformational leader in an organization.<sup>5</sup>

### Human Resource Management Group

The NRO’s Human Resource Management Group (HRMG) has begun its strategic planning process to support that of NRO senior leadership. Within HRMG’s strategic plan, you can read the words, “create a continuous learning organization.” These words are not mere rhetoric. HRMG has sponsored many efforts to expand this learning organization concept into the NRO, and has performed several supporting efforts.

Among these efforts are: 360-degree feedback pilot programs; workforce analy-



In her article, "The Nonprofit Executive as Chief Learning Officer," Nathan assigns the CLO five major responsibilities:

- Exemplify the learning organization.
- Shape a vision of the organization as a learner.
- Design the organization for learning.
- Empower the people to learn.
- Assess learning.

Within the NRO, I believe several individuals fit this description, though none is yet referred to as the NRO's CLO.

The first is Keith Hall, the Director of the NRO. His efforts in strategic planning have brought about a fundamental change in the NRO's focus on major improvements in the organization. The process he used was developed around three characteristics: senior management commitment and participation, senior leader ownership of processes and products, and specific individual and organizational accountability for all activities and outcomes.

Another excellent candidate is David Kier, the NRO's Principal Deputy Director. Kier first established the NRO's acquisition steering group. Under this group, major efforts to build a foundation of continuous learning and improvement in acquisition and personnel management have been implemented. Kier brought with him new ways to acquire complex systems that he has shared in the NRO.

Further, he championed earned value management (EVM) and recommended new techniques to implement EVM effectively in the NRO. Kier attempts to break through what Ray Strata describes as the "bottleneck of management innovation" in his [Strata's] *Sloan Management Review* article, "Organizational Learning – The Key to Management Innovation."<sup>6</sup> The NRO and its industry partners have long been able to sustain process and product innovations. Innovations of management are often the more challenging paradigm shifts to implement over time, particularly if the office continues to be successful in applying established processes.



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### Implementation a Significant Challenge

One of the most significant challenges of the learning organization is implementation. Ken Starkey's article titled, "What We Can Learn from the Learning Organization?" reviews several books including "Rethinking the Future," edited by Rowan Gibson.<sup>7</sup>

In the review, Starkey notes one of two levels of change pointed out by Peter Senge. This second level of change concerns the ways in which we organize ourselves to support learning.

Within the NRO, as I suspect within many organizations, the focus has been on individual learning. But the NRO has expanded this focus in a significant way to include learning and training as a group, and institutional sharing of learning experiences. NRO achieved this expanded focus through its Acquisition Center of Excellence (ACE).

The ACE provides individual training in a variety of acquisition areas at a classification level sufficient to address all NRO topics. But the ACE goes further. It provides just-in-time training to teams of people who will perform complex, acquisition source selection activities.

Essentially, the ACE captures lessons learned from previous teams and modifies their instructions to incorporate these new techniques. This institutional process of continuous learning is a true manifestation of the learning organization. The NRO's challenge will be to extend this concept of the learning organization across the NRO's entire workforce.

Jim Collins captures this challenge for each of us in his article, "The Learning Executive."<sup>8</sup> He points out that it is up to each of us to "respond to every situation with learning in mind." He asks us the question, "How would your day be different if you organized your time, energy, and resources primarily around the objective of learning instead of around performance?" In my estimation, this is truly a revolutionary way to consider implementation of the learning organization.

One particular NRO office has come close to implementing the learning organization in this way, through the establishment of learning not as a means to an end but as an end in itself. This office has incorporated learning as an end by carrying the concept into their strategies and goals.

Collins describes a technique used by the Granite Rock Company to institutionalize the learning organization. Granite Rock has each employee set annual goals in the format "Learn "XXX" so that I can "XXX"." This approach links continuous learning to performance and ensures the learning objective continues year after year. Translating vision statements about learning into institutional action will require innovative techniques such as this.

### Transition — Gradual But Deliberate

The National Reconnaissance Office is moving toward the learning organization...gradually in some ways, deliberately in others. The focus of senior management on the principles of the learning organization and the efforts of several offices such as HRMG and ACE, who are actively implementing the learn-

ing organization concepts, are helping to put the NRO on a path to continuous learning.

The close coupling between the NRO's strategic planning activities and the concept of the learning organization has formed a bridge that, ultimately, the NRO is crossing to achieve its vision:

*Freedom's Sentinel in Space: One Team, Revolutionizing Global Reconnaissance*

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# College DGL Program Still Attracting Best and Brightest

## Terry Little – From JDAM to JASSM

The Defense Systems Management College continues to provide students expert advice and experience, straight from the mouths of DoD's best and brightest program managers, through its Distinguished Guest Lecturer (DGL) program. We invite you to read what the Under Secretary of Defense (Acquisition & Technology), Dr. Jacques S. Gansler had to say about one of our recent guest lecturers in a speech to the National Contract Management Association Dec. 3, 1998.

"The fact that the Department of Defense is such a different place from what it was five years ago is due to individuals who have been willing to take risks — people like Terry Little, the Joint Air-to-Surface Program Director at Eglin Air Force Base, Florida. The Air Force had set a cap of \$400,000 for each JASSM [Joint Air-to-Surface Standoff Missile] unit (compared to an initial program estimate of \$700,000 per unit). But Terry Little and his team are going to try to bring that price down to \$300,000.

"Many don't believe this can be done. But, we are going to encourage Terry to keep on trying. If he succeeds, all the more power to him. If he can't do it, we can't fault him for trying — and he will still have achieved approximately a 50-percent cost reduction. Terry is taking a conscious and well-thought-out risk. *And that's what we need more of.*"



IN MAY 1996, [THEN] SECRETARY OF DEFENSE, WILLIAM PERRY PRESENTED THE SECRETARY OF DEFENSE MEDAL FOR MERITORIOUS CIVILIAN SERVICE TO TERRY R. LITTLE, [THEN] JDAM PROGRAM MANAGER. PICTURED FROM LEFT: PERRY; LITTLE'S WIFE, ELAINE; LITTLE; DAUGHTER, SHERRY.